

CM We claim:

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1. An electronic music instrument system, comprising:  
an electronic music instrument, having selectable groups of  
reproducible sounds and individually selectable reproducible  
sounds within said groups of sounds;

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an audio signal generator for energizing an audio amplifier  
responsive to different ones of a plurality of digital audio  
sources, including said groups of sounds and said individual  
sounds of said electronic music instrument;

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a graphical user interface for displaying at least one  
control graphic representing controllable parameters of said  
audio signals generated by said generator; and,

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control means responsive to operation of said control  
graphic for adjusting said controllable parameters of said  
generator and for selectively coupling different ones of said  
sources to said generator.

2. The system of claim 1, wherein said graphical user  
interface comprises:

a video display; and,

a touch-responsive overlay.

3. The system of claim 2, wherein one of said controllable  
parameters is voice selection for single instrument sound.

4. The system of claim 3, wherein one of said controllable  
parameters is key transposition for said single instrument sound.

5. The system of claim 4, wherein one of said controllable  
parameters is effects selection for said single instrument sound.

6. The system of claim 2, wherein:

said controllable parameters include multiple instrument sound selection and sound layer assignment, controlled responsive to operation of said at least one control graphic; and,

5 said at least one control graphic is displayed on a single screen of said graphical user interface.

7. The system of claim 6, wherein:

said musical instrument comprises a musical keyboard; and, one of said controllable parameters is allocation of each said sound layer to keys on said musical keyboard, said allocation also being controlled responsive to operation of said at least one control graphic.

8. The system of claim 6, wherein:

said musical instrument comprises a musical keyboard; and, operation of said at least one control graphic also enables key allocation responsive to said musical keyboard.

9. The system of claim 6, wherein:

said graphical user interface generates a further control graphic;

5 one of said controllable parameters is a volume control for each said sound layer, responsive to operation of said further control graphic; and,

said further control graphic is displayed on a further single screen of said graphical user interface.

10. The system of claim 6, wherein:

said graphical user interface generates a further control graphic;

one of said controllable parameters is key transposition adjustment for each said sound layer, responsive to operation of  
5 said further control graphic; and,

said further control graphic is displayed on a further single screen of said graphical user interface.

11. The system of claim 6, wherein:

said graphical user interface generates a further control graphic;

one of said controllable parameters is pan adjustment for each said sound layer, responsive to operation of said further control graphic; and,

said further control graphic is displayed on a further single screen of said graphical user interface.

12. The system of claim 6, wherein:

said musical instrument comprises a musical keyboard; and,  
one of said controllable parameters includes allocation of keys on said keyboard to different sounds, responsive to  
5 operation of said at least one control graphic.

13. The system of claim 6, wherein:

said musical instrument comprises a musical keyboard; and,  
one of said controllable parameters includes assignment of said sound layers to ranges of said keys, responsive to operation  
5 of said at least one control graphic.

14. The system of claim 6, wherein said controllable parameters include drum syncopation, triggers, key change and volume, responsive to operation of said at least one control graphic.

15. The system of claim 6, wherein:

said graphical user interface displays a further control graphic;

said controllable parameters include multiple channel recording and allocation of different ones of said sound layers to different ones of said multiple channels, responsive to operation of said further control graphic; and,

said further control graphic is displayed on a further single screen of said graphical user interface.

16. The system of claim 15, wherein said controllable parameters include allocation of drum syncopation to different ones of said multiple channels, responsive to operation of said further control graphic.

17. The system of claim 16, wherein said controllable parameters include same-channel recording and different-channel recording of said sound layers and said drum syncopation, responsive to operation of said further control graphic.

18. The system of claim 2, wherein:

said musical instrument comprises a musical keyboard;

said controlled parameters include drum voice selection and allocation to a key on said musical keyboard, responsive to operation of said at least one control graphic; and,

said at least one control graphic is displayed on a single screen of said graphical user interface.

19. The system of claim 2, wherein:

said controllable parameters include drum syncopation, triggers, key change and volume, responsive to operation of said at least one control graphic; and,

5 said at least one control graphic is displayed on a single screen of said graphical user interface.

20. The system of claim 1, wherein:

said musical instrument comprises a musical keyboard; and, said controllable parameters include audio characteristics of further sources, other than said sources originating in said musical keyboard of said musical instrument.

21. The system of claim 20, wherein said further sources comprise:

a hard disk drive;  
a floppy disk drive; and,  
a compact disc drive.

22. The system of claim 2, wherein said plurality of sources further comprises a modem for communicating with an on-line source of digital information.

23. The system of claim 2, further comprising a piano housing, said system being mounted within said piano housing.

24. The system of claim 2, further comprising a piano housing, said video display being mounted in said piano housing.

25. The system of claim 2, further comprising a piano housing having a music stand formed integrally therewith, said video display being mounted in said music stand.

26. The system of claim 2, further comprising a piano housing having a music stand formed integrally therewith, said video display forming an integral part of said music stand.

27. The system of claim 1, wherein said control means is exclusively responsive to said graphical user interface.

28. The system of claim 2, wherein said electronic musical instrument comprises a musical keyboard.

29. The system of claim 28, wherein said control means is exclusively responsive to said graphical user interface and to said musical keyboard.

30. The system of claim 1, wherein said sources include at least one prerecorded source.

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